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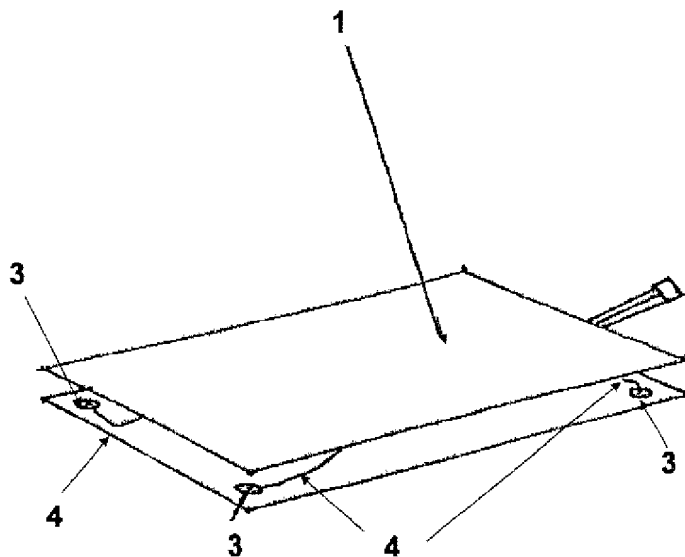
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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR DETECTING HEART BEAT AND DETERMINING HEART AND RESPIRATION RATE



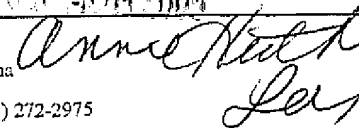
(57) Abstract: Disclosed is an apparatus and system for non-invasively detecting and determining the heart rate and respiration rate of a patient, while the patient is within their sleep environment, suitable for both home and hospital monitoring, which includes an array of at least two pressure-sensitive sensors, positioned under the mattress, which gathers data from the patient corresponding to the vertical and horizontal movements of the body, and wherein the data from each sensor is collected, filtered, and analyzed and finally, the difference between the results gathered from each sensor detects and determines heart and respiration rates.

WO 2005/074379 A3

INTERNATIONAL SEARCH REPORT

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PCT/IL05/00158

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A61B 5/02, 5/103, 5/117 US CL : 600/500, 483, 595, 481 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 600/500-503, 483, 595, 481, 484, 529, 534, 535, 552, 587 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,506,153 B1 (LITTEK et al) 14 January 2003 (14.01.2003), Abstract and Figures 3 and 5.	1 and 11
A	US 6,030,347 A (NAKAMURA et al) 29 February 2000 (29.02.2000), Abstract and Figure 2.	1 and 11
A	US 4,438,771 A (FRIESEN et al) 27 March 1984 (27.03.1984), Abstract and Figures 1 and 2.	1 and 11
A	US 4,066,072 A (CUMMINS) 03 January 1978 (03.01.1978), Abstract and Figures 1, 10, 10A, and 10B.	1 and 11
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Date of the actual completion of the international search 26 June 2005 (26.06.2005)		Date of mailing of the international search report 02 AUG 2005
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Navin Natnithithadha Telephone No. (571) 272-2975 

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U.S. : 600/500-503, 483, 595, 481, 484, 529, 534, 535, 552, 587

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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